

The listing of claims will replace all prior versions and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Currently Amended) A cooling system for a computing device, the computing device including an enclosure than defines a space in which a fan and a heat producing element is contained, the fan generating an air flow through the space and over the heat producing element so as to cool the heat producing element contoured panel for directing a flow of air within an electronic device, the cooling system comprising:

a removable panel configured to be removably [placed proximate] secured to [an electronic] a portion of the computing device at a desired location relative to the computing device, the panel being easily removable so as to provide access to internal components of the enclosure located around, behind or underneath the removable panel, the electronic device having a heat producing element and a fan, the removable panel further having a contoured portion configured to be placed proximate to the fan that protrudes into the space of the enclosure so as to help direct [a] the air flow of air from the fan across the heat producing element, the contoured portion increasing the speed of the air flow by reducing the area through which the air flow can pass from the fan to the heat producing element, the contoured portion including a sloped inlet portion for incoming air flow and a sloped outlet portion for exiting air flow, the air flow of air produced across the contoured portion facilitating the cooling of the heat producing element when the heat producing element is operated in a normal state, the heat producing element possibly overheating if the removable panel is not properly positioned in its desired location relative to the computing device; and

a sensor configured to determine whether the removable panel is properly positioned in its desired location relative to the computing device [placed proximate to the electronic device], the sensor generating an error signal when the removable panel is not properly positioned in its desired location relative to the computing device so as to prevent overheating of the heat producing element.

3. (Currently Amended) The contoured panel of claim 2 wherein the sensor is an optical sensor configured to emit a beam of light and to detect a reflection of the beam of light so as to determine whether the panel is properly positioned placed proximate to the electronic device, and wherein the panel further comprises a reflective tab configured to reflect the beam of light back to the optical sensor when the panel is properly positioned placed proximate to the electronic device.

4. (Currently Amended) The contoured panel of claim 2 wherein the heat producing element is a microprocessor configured to transmit a warning message to a user of the electronic device upon a determination by the sensor that the panel is not properly positioned placed proximate to the electronic device.

5. (Currently Amended) The contoured panel of claim 2 wherein the heat producing element is a microprocessor configured to shut down upon a determination by the sensor that the panel is not properly positioned placed proximate to the electronic device.

6. (Currently Amended) The contoured panel of claim 2 wherein the heat producing element is a microprocessor configurable in a first mode so as to consume a first amount of electrical power and a second mode so as to consume a second amount of electrical power, the first amount

greater than the second amount, and wherein the microprocessor is further configurable to transition from the first mode to the second mode upon a determination by the sensor that the panel is not properly positioned placed proximate to the electronic device.

7. (Currently Amended) The contoured panel of claim 2 wherein the fan is configured to operate at a first speed and a second speed, the second speed greater than the first speed, and wherein the fan is further configured to transition from the first speed to the second speed upon a determination by the sensor that the panel is not properly positioned placed proximate to the electronic device.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Currently Amended) An air-cooled [electronic] computing device, comprising:
a housing for enclosing various operational components of the computing device, the housing defining a space therein for placement of internal components, the housing having an access opening at one of its sides for allowing access to the internal components contained in the space;
a microprocessor disposed within a first side of the space provided by the housing; and
a fan unit disposed within a second side of the space provided by the housing; and
a panel configured to be removably [placed proximate] attached to the housing in front of the access opening, the panel being free from the housing in a removed condition so as to

provide access through the access opening, the panel being secured to the housing in an attached position in front of the access opening thereby preventing access through the access opening, the panel having a contoured portion that protrudes into the space provided by the housing between the fan unit and the microprocessor, the contoured portion being configured to direct a flow of air from the fan unit across the microprocessor so as to cool the microprocessor; and

a sensor configured to determine whether the panel is properly placed proximate to the housing at its desired location relative to the housing.

12. (Currently Amended) The air-cooled electronic device of claim 11 wherein the sensor is an optical sensor configured to emit a beam of light and to detect a reflection of the beam of light so as to determine whether the panel is properly placed proximate relative to the housing, and wherein the panel further comprises a reflective tab configured to reflect the beam of light back to the optical sensor.

13. (Currently Amended) The air-cooled electronic device of claim 11 wherein the microprocessor is configured to transmit a warning message to a user of the electronic computing device upon a determination by the sensor that the panel is not properly placed proximate relative to the housing.

14. (Currently Amended) The air-cooled electronic device of claim 11 wherein the microprocessor is configured to shut down upon a determination by the sensor that the panel is not properly placed proximate relative to the housing.

15. (Currently Amended) The air-cooled electronic device of claim 11 wherein the microprocessor is configurable in a first mode so as to consume a first amount of electrical

power and a second mode so as to consume a second amount of electrical power, the first amount greater than the second amount, and wherein the microprocessor is further configurable to transition from the first mode to the second mode upon a determination by the sensor that the panel is not properly placed proximate relative to the housing.

16. (Currently Amended) The air-cooled electronic device of claim 11 wherein the fan is configured to operate at a first speed and a second speed, the second speed greater than the first speed, and wherein the fan is further configured to transition from the first speed to the second speed upon a determination by the sensor that the panel is not properly placed proximate relative to the housing.

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Previously Presented) A computer, comprising:

a housing divided into a plurality of discrete thermal zones, each thermal zone compartmentalizing a heat producing element;

a fan disposed inside each of the thermal zones and configured to force air over the heat producing element;

a removable duct door having one or more contoured portions, the contoured portions protruding into at least one thermal zone so as to force air over the heat producing element located therein; and

a sensor configured to determine whether the duct door is placed proximate to the housing.

26. (Original) The computer of claim 25 wherein the sensor is an optical sensor configured to emit a beam of light and to detect a reflection of the beam of light so as to determine whether the duct door is placed proximate to the housing, and wherein the duct door further comprises a reflective tab configured to reflect the beam of light back to the optical sensor.

27. (Original) The computer of claim 25 wherein the heat producing element is a microprocessor configured to transmit a warning message to a user of the computer upon a determination by the sensor that the duct door is not placed proximate to the housing.

28. (Original) The computer of claim 25 wherein the heat producing element is a microprocessor configured to shut down upon a determination by the sensor that the duct door is not placed proximate to the housing.

29. (Original) The computer of claim 25 wherein the heat producing element is a microprocessor configurable in a first mode so as to consume a first amount of electrical power and a second mode so as to consume a second amount of electrical power, the first amount greater than the second amount, and wherein the microprocessor is further configurable to transition from the first mode to the second mode upon a determination by the sensor that the duct door is not placed proximate to the housing.

30. (Original) The computer of claim 25 wherein the fan is configured to operate at a first speed and a second speed, the second speed greater than the first speed, and wherein the fan is further configured to transition from the first speed to the second speed upon a determination by the sensor that the duct door is not placed proximate to the housing.

31. (Cancelled)

32. (Cancelled)

33. (New) The cooling system as recited in claim 2 wherein the contoured portion protrudes into the space of the enclosure between the fan and the heat producing element when the removable panel is properly positioned relative to the computing device.

34. (New) The cooling system as recited in claim 2 wherein the contoured portion protrudes into the space of the enclosure behind the back of the fan and next to the side of the heat producing element when the removable panel is properly positioned relative to the computing device.

35. (New) The cooling system as recited in claim 2 wherein the removable panel is a removable wall panel configured to be removably secured to a side of the enclosure of the computing device in front of an access opening of the enclosure of the computing device, the removable wall panel forming an interior wall of the enclosure when secured to the side of the enclosure of the computing device.

36. (New) The cooling system as recited in claim 2 wherein the removable panel is made from a transparent material thereby allowing visual inspection of various components of the computing device without disturbing the air flow through the enclosure of the computing device.

37. (New) The cooling system as recited in claim 2 wherein the enclosure defines a second space in which a second fan and a second heat producing element is contained, the second fan generating an air flow through the second space and over the second heat producing element so as to cool the second heat producing element, the second space being distinct from the first space, and wherein the removable panel has a second contoured portion that protrudes into the second space of the enclosure so as to help direct the air flow from the second fan across the second heat producing element, the second contoured portion increasing the speed of the air flow by reducing the area through which the air flow can pass from the second fan to the second heat producing element, the second contoured portion including a sloped inlet portion for incoming air flow and a sloped outlet portion for exiting air flow, the air flow produced across the second contoured portion facilitating the cooling of the second heat producing element when the heat producing element is operated in a normal state, the second heat producing element possibly overheating if the removable panel is not properly positioned in its desired location relative to the computing device.

38. (New) The cooling system as recited in claim 37 wherein the first and second heat producing elements generate different amounts heat and thus require different amounts of cooling, the first contoured portion being configured differently than the second contoured portion so that each contoured portion facilitates the appropriate cooling of the first and second heat producing elements.

39. (New) The cooling system as recited in claim 37 wherein the first contoured portion in its entirety is positioned between the first fan and the first heat producing element, and wherein at least a portion of the second contoured portion extends along the length of the second heat producing element.

40. (New) The cooling system as recited in claim 2 wherein the sensor is a proximity sensor configured to detect the presence of a metallized portion of the removable panel so as to determine whether the removable panel is properly positioned relative to the computing device.

41. (New) The cooling system as recited in claim 2 further comprising a handle that facilitates the removal and placement of the removable handle at the desired location relative to the computing device.

42. (New) The computing device as recited in claim 11 wherein the housing defines a second space therein for placement of internal components, the second space being distinctly separate from the first space, and further comprising one or more peripheral cards disposed within a first side of the second space provided by the housing, and a second fan unit disposed within a second side of the second space provided by the housing, and wherein the panel has a

second contoured portion that protrudes into the second space provided by the housing behind the second fan unit and along the peripheral cards, the second contoured portion being configured to direct a flow of air from the second fan unit across the peripheral cards so as to cool the peripheral cards.

43. (New) The computing device as recited in claim 11 wherein the housing includes a plurality of slots, and wherein the panel includes a plurality of tabs that are fitted within the slots in order to help attach the panel to the housing, and wherein the sensor is contained inside the housing proximate the slots, the sensor detecting the presence of the tabs within the slots, the presence of the tabs indicating that the panel is properly placed relative to the housing.

44. (New) The computing device as recited in claim 11 wherein the microprocessor is surrounded by cooling fins and wherein the flow of air is directed over the microprocessor and through the cooling fins.